

COMMONWEALTH OF MASSACHUSETTS
Department of Telecommunications and Energy

RESPONSE OF THE ATTORNEY GENERAL TO THE
SECOND SET OF INFORMATION REQUESTS FROM THE
BAY STATE GAS COMPANY
DTE 05-27

Dated: August 10, 2005

Responsible Party: David Effron

DTE-AG-2-1 In reference to the pre-filed testimony of David J. Effron ("Effron testimony") at 5, lines 3-5, please provide analysis using Company data to support and elaborate on the statement that: "Application of the PBR price cap index adjustment to base rates that include a return on rate base in the revenue requirement implicitly provides an allowance for capital expenditures that cause the Company's rate base to grow."

Response: The Company's total requested revenue requirement includes a \$35,938,000 return requirement plus income taxes of \$16,083,000 for a total pre-tax return requirement of \$52,021,000 (Schedule JES-16, Page 1). Applying an assumed PBR adjustment of 1.7%, as on Company Exhibit JAF 2-9, to base rates which includes this pre-tax return requirement in the total revenue requirement implicitly allows additional revenues of \$884,000 to cover rate base growth that is not offset by revenue growth.

Assume that non-revenue plant additions, excluding incremental SIR expenditures, in the same year are \$20 million. This is based on the Company's experience in the years 2002-2004. Average plant additions for this 3 year period were approximately \$33 million. Of this amount, \$17.7 million was for mains and services excluding base steel replacement. This \$17.7 million was assumed to be revenue producing for the purpose of this analysis. This leaves \$15.3 million of non-revenue producing additions on average for the 3 year period. To be conservative, this amount was rounded up to \$20 million, although the 3 year average already treats additions to meters, meter installations, and property on customer premises as being non-revenue producing.

The increase in rate base from plant additions will be offset by depreciation and amortization. As requested by the Company, this amount is \$32,710,000, exclusive of the Metscan amortization. Thus, the net effect on rate base of non-revenue producing plant additions less the effect of depreciation and amortization is a reduction to rate base of \$12,710,000. If the incremental SIR expenditures are assumed to be \$18 million, the net increase to rate base is \$5,290,000. This does not take any account of growth in balance of deferred taxes that will also be taking place and reducing the rate base. The revenue requirement associated with this rate base growth is \$690,000 (including income taxes).

Using these Company data, with assumed incremental SIR expenditures of \$18 million, the application of the PBR price cap index adjustment to base rates that include a return on rate base in the revenue requirement provides an allowance for capital expenditures that is more than adequate to cover the SIR program.

See attached schedule referenced as DTE-AG-2-1, Schedule 1.

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DTE-AG-2-2 In reference to the Effron testimony at 7, lines 20-22, please elaborate on the statement that: “The inclusion of the carrying costs from in-service to rate recovery in the SIR revenue requirement allows the Company to recover a revenue deficiency that may not even exist” considering the Company’s claim that the SIR revenue recovery method allows Bay State to recover the costs of its incremental non-discretionary investment” (Exh. BSG/SHB-1, at 39, lines 4-6).

Response: When looked at alone, the incremental cost, if any, of the Company’s SIR program would increase its costs, and therefore its revenue requirement, other things equal. However, other things are not equal. There will be changes in the Company’s rate base, revenues, expenses, and possibly even cost of capital. It is entirely possible that changes in these other components of the Company’s revenue requirement could outweigh the effect of the incremental SIR costs. Thus the Company would not have a revenue deficiency, even with the incremental costs of the SIR program included in rate base. In these circumstances, the “carrying costs from in-service to rate recovery” would provide the Company with a pure windfall.

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Responsible Party: Jon Cavallo

DTE-AG-2-3 In reference to the pre-filed testimony of Jon R. Cavallo ("Cavallo testimony") at 9, lines 6-7, please provide the basis for the \$40,000 cost of a root cause analysis for corrosion leaks and list in detail the items covered by such an analysis.

Response: Mr. Cavallo estimated the cost of a root cause analysis for the corrosion leaks in the Bay State Gas Company unprotected bare steel and unprotected coated steel based on an approach that he has used in the past, as follows:

Step 1: Failure Definition
8 hrs @ \$250/hr = \$2,000

Step 2: Interviews and Examination of Records
24 hrs @ \$250/hr = \$5,000

Step 3: Specification Review
8.0 hrs @ \$250/hr = \$2,000

Step 4: Field Observations
20 hrs @ \$250/hr = \$5,000

Step 5: Laboratory Observations
\$5,000

Step 6: Examination of Coatings Used
8 hrs @ \$250/hr = \$2,000

Step 7: Literature Search
20 hrs @ \$250/hr = \$5,000

Step 8: Hypothesized Mechanism
8 hrs @ \$250/hr = \$2,000

Step 9: Reconstruction and Testing
20 hrs @ \$250/hr = \$5,000

Step 10: Identify root cause (if not possible, identify multiple causes) for corrosion failures
24 hrs @ \$250/hr = \$6,000

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Responsible Party: Jon Cavallo

DTE-AG-2-4 In reference to the Cavallo testimony at 12-13, please cite to specific documents in the instant docket as a basis for the statement that “the Company has known since the mid-1980's that the coatings on its remaining unprotected coated pipes have been compromised.”

Response: Mr. Cavallo relied upon the following documents that demonstrate the Company had started the process of evaluating the effectiveness of coatings on its unprotected steel pipe since the mid-1980s. AG-2-16(b), p. 28 of 34 (Rudden Report); AG-2-16(b), p. 12 of 34 (Rudden Report), and AG-14-25 (Company chart).

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Responsible Party: Jon Cavallo

DTE-AG-2-5 In reference to the Cavallo testimony at 15, lines 10-11 and at 14, lines 9-10, please explain or reconcile the apparent inconsistency between the expressed opinion that “the corrosion of the unprotected piping is increasing” with the assertion that for Bay State the total number of leaks categorized as corrosion “exhibit a progressively downward trend from the period 2000 to 2004”.

Response: Mr. Cavallo corrected his prefiled testimony to insert the word “rate” after the words “the corrosion” in the quoted text. See Transcript, Vol. 17, p. 2708. The corrosion rate, expressed in leaks per mile by the Company, could be rising, yet the total number of corrosion leaks in the system could be trending down at the same time because the Company is removing corroded, leaking steel main and replacing it with new plastic or protected coated pipe. See also discussion Transcript, Vol. 17, pp. 2730-2733; 2748-2753.

To give an extreme example of why the leak rate is not the only factor to consider when examining the corrosion in the Company’s system: assume that the Company is experiencing a leak rate of 150 corrosion leaks per mile on a given pipe material, but only has 1/10 of a mile of this pipe in its system, yielding a total of just 15 corrosion leaks. While the leak rate might be very high, and even trending upward from year to year, the total number of leaks may be modest or trending down given system configuration and replacement dynamics.

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Responsible Party: Jon Cavallo

DTE-AG-2-6 Refer to the Cavallo testimony at 14-15. Would the assertion that “there is no way in which it [Bay State] can set priorities for the SIR program nor judge the severity of the pipe corrosion in its system” in the absence of a root cause analysis for corrosion leaks be changed or modified based on the Company’s preference for what Bay State characterized as a more cost-effective “area-based mains replacement” approach as described in Exh. BSG/DGC-1, at 18-19 and the Company’s response to information request DTE-3-28? Please explain your response.

Response: No. As an engineer who must consider public safety paramount, Mr. Cavallo would not favor the Company’s geographic area-based approach to prioritizing replacements, if that system leaves high risk pipe segments in the ground that threaten public safety. See Transcript, Vol. 17, pp. 2771-2773.